

AMENDMENTS TO THE CLAIMS

The Listing of Claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (canceled).
2. (currently amended) Apparatus for reconstructing a ligament, said apparatus comprising:

a bone fixation element having a distal end, [[and]] a proximal end, and a central bore extending between said distal end and said proximal end, said central bore having a first diameter, and said bone fixation element being adapted for positioning in a bone tunnel;

a flexible filament having a distal end and a proximal end, said distal end having retaining means for holding a graft ligament, and said flexible filament having a second diameter smaller than said first diameter so as to allow said flexible filament to slidingly pass through said central bore of said bone fixation element, whereby said flexible filament holding the graft ligament in the bone tunnel is slideably positionable through said central bore of said bone fixation element; and

~~a crimp configured for attachment to said flexible filament, said crimp having at least one given cross-sectional width, said at least one given cross-sectional width being greater than said first diameter~~ crimped onto said flexible filament such that said crimp is securely fixed to said flexible filament independent of engagement between said crimp and said bone fixation element, whereby said crimp is fixedly positionable to said flexible

filament adjacent to said proximal end of said bone fixation element so as to prevent distal movement of said flexible filament relative to said bone fixation element and hence prevent distal movement of said graft ligament in the bone tunnel.

3. (canceled).

4. (currently amended) A method for reconstructing a ligament, said method comprises:

providing apparatus for reconstructing a ligament, said apparatus comprising:

a bone fixation element having a distal end and a proximal end, and a central bore extending between said distal end and said proximal end, said central bore having a first diameter, and said bone fixation element being adapted for positioning in a bone tunnel;

a flexible filament having a distal end and a proximal end, said distal end having retaining means for holding a graft ligament, and said flexible filament having a second diameter smaller than said first diameter so as to allow said flexible filament to slidingly pass through said central bore of said bone fixation element, whereby said flexible filament holding the graft ligament in the bone tunnel is slideably positionable through said central bore of said bone fixation element; and

a crimp configured for attachment to said flexible filament, said crimp having at least one given cross-sectional width, said at least one given cross-sectional width being greater than said first diameter, whereby said crimp is

fixedly positionable to said flexible filament adjacent to said proximal end of said bone fixation element so as to prevent distal movement of said flexible filament relative to said bone fixation element and hence prevent distal movement of said graft ligament in the bone tunnel;

positioning said flexible filament through said central bore of said bone fixation element, and positioning said bone fixation element in a first bone tunnel portion, and positioning said graft ligament in a second bone tunnel portion by drawing said flexible filament through said bone fixation element; and

attaching said crimp onto said flexible filament adjacent to said proximal end of said bone fixation element such that said crimp is securely fixed to said flexible filament independent of the engagement between said crimp and said bone fixation element, said crimp being selectively biased against a portion of said flexible filament relative to said bone fixation element ~~so as to prevent movement of said flexible filament toward said distal end of said bone fixation element.~~

5. (new) An apparatus for reconstructing a ligament as in claim 2, wherein said bone fixation element comprises an exterior surface and a thread outwardly projecting therefrom.

6. (new) An apparatus for reconstructing a ligament as in claim 2, wherein said flexible filament comprises a braided cable.

7. (new) An apparatus for reconstructing a ligament as in claim 2, further wherein the means for holding a graft ligament comprises a loop formed on the flexible filament.

8. (new) An apparatus for reconstructing a ligament as in claim 2, further comprising a drill guide.

9. (new) An apparatus for reconstructing a ligament as in claim 8, wherein the drill guide includes an endosteal guide.

10. (new) A method for reconstructing a ligament as in claim 4, further comprising attaching a graft ligament to said retaining means for holding a graft ligament.

11. (new) A method for reconstructing a ligament as in claim 10, further comprising tensioning said flexible filament such that said crimp is biased against said bone fixation element so as to secure said graft ligament inside said bone tunnel.

12. (new) Apparatus for reconstructing a ligament, said apparatus comprising:
a cannulated screw having an interior surface and an exterior surface, the interior surface bounding a bore extending through the cannulated screw, a thread outwardly projecting from the exterior surface of the cannulated screw;

a flexible filament extending through at least a portion of the bore of the cannulated screw; and

a crimp crimped onto the flexible filament such that the crimp is securely fixed to the flexible filament independent of engagement between the crimp and the cannulated

screw, the crimp being selectively biased against the cannulated screw so as to fix a portion of the flexible filament relative to the cannulated screw.

13. (new) An apparatus for reconstructing a ligament as in claim 12, further comprising a drill guide having a proximal end and a distal end.

14. (new) An apparatus for reconstructing a ligament as in claim 13, wherein the distal end of the drill guide includes an endosteal guide.

15. (new) An apparatus for reconstructing a ligament as in claim 14, wherein the endosteal guide comprises means for retaining a flexible filament such that the endosteal guide may grab at least a portion of the flexible filament.

16. (new) An apparatus for reconstructing a ligament as in claim 14, wherein the endosteal guide has an interior surface and an exterior surface, the interior surface bounding a channel extending through the endosteal guide such that the flexible filament may pass through the channel of the endosteal guide.

17. (new) An apparatus for reconstructing a ligament as in claim 16, further comprising means for retaining a flexible filament which may be passed through the channel of the endosteal guide to grab at least a portion of the flexible filament.

18. (new) An apparatus for reconstructing a ligament as in claim 12, wherein the flexible filament comprises means for retaining a graft ligament.

19. (new) A method for reconstructing a ligament comprising the steps of:
forming a tunnel within a bone;
securing a bone fixation element within the tunnel, a flexible filament extending through a bore formed on the bone fixation element;
securing a crimp onto the flexible filament at a location spaced apart from the bone fixation element such that the crimp is securely fixed to the flexible filament; and
tensioning the flexible filament such that the crimp is biased against the bone fixation element.

20. (new) A method for reconstructing a ligament as in claim 19, wherein the step of drilling the tunnel comprises drilling a first bone tunnel through at least a portion of a tibia and at least a portion of a femur, a distal end of the first bone tunnel forming an opening on the tibia.

21. (new) A method for reconstructing a ligament as in claim 20, further comprising the step of inserting an endosteal guide through the distal end of the first bone tunnel.

22. (new) A method for reconstructing a ligament as in claim 21, wherein the endosteal guide comprises means for gripping the flexible filament.

23. (new) A method for reconstructing a ligament as in claim 20, further comprising drilling a second bone tunnel through a portion of the femur so as to intersect with the first bone tunnel.

24. (new) A method for reconstructing a ligament as in claim 23, wherein the second bone tunnel intersecting with the first bone tunnel at an angle.

25. (new) A method for reconstructing a ligament as in claim 24, wherein the angle is in a range of about 30 ° to about 60 °.

26. (new) A method for reconstructing a ligament as in claim 23, wherein the step of securing the bone fixation element comprising securing the bone fixation element within the second bone tunnel.

27. (new) A method for reconstructing a ligament as in claim 19, wherein the step of securing a bone fixation element within the tunnel comprises screwing the bone fixation element into the tunnel, the bone fixation element having an outwardly projecting thread that engages the bone.

28. (new) A method for reconstructing a ligament as in claim 19, wherein the step of securing the bone fixation element within the tunnel comprises:

advancing the flexible filament through the tunnel; and

passing the bone fixation element over the flexible filament.

29. (new) A method for reconstructing a ligament as in claim 19, further comprising securing a ligament to the flexible filament.